REMARKS

Claim 10 has been canceled without prejudice. Independent claims 1 and 16 have been replaced by new independent claims 22 and 29, respectively, and dependent claim 5 has been replaced by new claims 25 and 26. Claims 2-8, 11-15 and 17-19 have been amended, and new dependent claims 23-28 and 30-32 have been added. Claims 2-4, 6-9, 11-15, 17-19 and 22-32 are presently pending.

Claims 22 and 29 have been drafted to clarify what is the claimed invention and conform to claiming formalities, so as to overcome the rejection under 35 U.S.C. § 112 ("Section 112"), second paragraph, for indefiniteness. In addition, the claims depending from claims 22 and 29 have been amended or drafted to conform to claiming formalities.

Accordingly, the Examiner's rejections of the claims under Section 112 should be withdrawn.

The 35 U.S.C. § 101 Rejections

Claims 1-15 and 17-18 were rejected under 35 U.S.C. § 101 ("Section 101") as being directed to non-statutory subject matter, because the claims do not set forth a useful, concrete and tangible result. Although the Examiner did not explicitly reject system claims 16-17 under Section 101, it is assumed that the Examiner also intended to reject claims 16-17 under Section 101 as being directed to non-statutory subject matter.

New independent method claim 22, which replaces independent method claim 1, is directed to simulating order processing processes used for producing a product and generates a practical, real world result in the form of assumption data which is outputted to production sites so as to provide that new orders for the product can be introduced

into a production process as late as possible in the production process. (See specification, for example, at page 26, lines 11-26).

Referring to claim 22, the assumption data is a "useful" result, because the assumption data can be used, for example, by motor vehicle production sites to improve production processes and, thus, in turn permit motor vehicle dealers to satisfy customer preferences for vehicles on short notice. (See specification, for example, at page 1, lines 5-10, page 17, lines 1-15 and page 26, lines 11-26). As described in the specification, the assumption data may include, for example, a complete specification of features of products according to updated demand quantities or terms relating to the production of products, such as freeze point data.

In addition, the assumption data generated by claim 22 is a "concrete" result, because the assumption data is determined based upon specific data, such as, for example, manufacturing and supplier capacities, and constitutes reproducible data.

Further, the method of claim 22 outputs the "assumption data" to the production sites, such that the assumption data is fixed and reportable data useful in a real world, practical application. For example, assumption data for motor vehicle products, which is a function of the updated demand quantities, is outputted to the motor vehicle production sites and is the result of interactions between motor vehicle dealers and manufacturers whose objective is to reduce vehicle delivery times and increase vehicle delivery reliability. (See specification, for example, at page 17, lines 1-15, page 26, lines 11-26 and page 39, lines 21-25).

Similar to new independent claim 22, new independent system claim 29, which replaces independent system claim 16, is directed to simulating order processing processes for producing a product and, furthermore, includes limitations corresponding

13

to the limitations of claim 22 discussed above. Thus, like claim 22, claim 29 produces assumption data which constitutes a useful, tangible and concrete result having practical, real world applications.

Accordingly, claims 22 and 29, and claims 2-4, 6-9, 11-15 and 17-18 and new claims 23-28 and 30-32 which depend from claims 22 or 29, are directed to statutory subject matter. Therefore, it is respectfully submitted that the rejections based on Section 101 should be withdrawn.

The 35 U.S.C. § 102 Rejections

Claims 1-19 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Handbook of Simulation: Principles, Methodology, Advances, Applications and Practice*, by Jerry Banks (1998) ("Banks").

New independent claims 22 and 29, and claims 2-4, 6-9, 11-15 and 17-18 and new claims 23-28 and 30-32, which depend directly or indirectly from claims 22 or 29, clearly are patentable over Banks.

As discussed above, amended claim 22 is directed to a method for simulating order processing processes used for producing a product which, in relevant part, includes automatically adjusting demand quantities for a class of product for a predefined time period based on manufacturing or supplier capacities, and generating updated demand quantities by evaluating at least one of approved firm order allocations, approved modular allocations and simulated buyer orders newly received by dealers for the product. In addition, claim 22 requires "adjusting the updated demand quantities with respect to restrictions of at least one of production sites and suppliers", "automatically allocating at least a portion of the updated demand quantities to the production sites", and "simulating at least one of production and supply for the

14

production based on the allocation" of the updated demand quantities to the production sites. Further, claim 22 generates assumption data representative of a simulated matching of the updated demand quantities with at least one of customer orders and dealer specifications of finished products, and outputs the assumption data to the production sites.

Although Banks discusses theoretical principles of simulating modeling in relation to the automobile industry (see Chapter 15), Banks fails to teach or suggest a method for simulating order processing processes which initially uses demand quantities for a product (step a) of claim 22) to simulate a production process, such as an average yearly production process (see FIGs. 20 and 21), and generates updated demand quantities (step c) of claim 22) based on "newly received orders" to update the simulation, such that differences between the simulation and a real production process can be minimized.

Contrary to the Examiner's assertion, the simple model of a banking system with one queue of customers and one teller described by Banks does not in any way relate to a production process to which a method for simulating order processing processes can be applied, as set forth in claim 22, where the production process involves multiple variables including manufacturing and supplier capacities, firm order allocations, approved modular allocations, customer orders and dealers specification for finished products, such as, for example, associated with manufacturing an automobile as the finished product.

Referring to claim 22, step b) of the simulation method automatically adjusts demand quantities based on manufacturing or supplier capacities, which leads to allocation of the demand quantities for processing at production sites. In contrast,

15

Banks describes a probabilistic customer queuing model (see Figures 2.9 and 2.10 and page 41-42) for a banking system, where the customers (demand quantities) are processed one by one by a teller in order of arrival without any adjustment. In Banks, the number of customers allowed for a teller is only the number that the teller can serve for a time period, such that a queue would never build up and no adjustment, as required by the claimed invention, is provided.

Further, contrary to the Examiner's assertion at page 8, last paragraph of the Official Action, Table 2.2 in Banks, which describes the state of the model of a banking system for each changing event (arrival, departure), does not relate to the step b) claim feature of "determining at least one of approved firm order allocations and approved modular allocations". In addition, Figure 2.6 in Banks, which is a symbolic diagram of the banking system showing the probabilistic arrival of customers (demand quantities) as an exponential function, does not describe, as indicated by the Examiner at page 9, first and second paragraphs of the Action, (i) generating updated demand quantities for the defined time period by evaluating at least one of approved firm order allocations, approved modular allocations and simulated buyer orders newly received by dealers, as required by step c); and (ii) adjusting the updated demand quantities with respect to restrictions of at least one of the production sites and suppliers, as required by step d).

Also, Figure 2.9 in Banks, which is a flowchart providing logic for managing an arriving customer at a bank, does not concern the service part of the model of a banking system. Consequently, Figure 2.9 in Banks does not teach or suggest simulating the production and supply for the production of a product based on the allocation of updated demand quantities to the production sites, as required by steps d) and e) of claim 22. Furthermore, Banks nowhere teaches or suggests generating assumption data

16

representative of a simulated matching of assumptions with at least one of customer orders or dealer specifications of a finished product, as required by step g) of claim 22.

Accordingly, claim 22 is patentable over Banks.

In addition, new independent claim 29, which claims a simulation system having limitations corresponding to those of claim 22 discussed above, is patentable over Banks for the same reasons as set forth above with respect to claim 22.

Further, claims 2-4, 6-9, 11-15, 17-18, 23-28 and 30-32 which depend directly or indirectly from claims 22 or 29, are also patentable over Banks for the same reasons as set forth above with respect to claim 22 and because of the further restrictions they add.

Withdrawal of the Section 102 rejections is, therefore, respectfully requested.
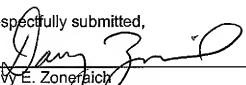
CONCLUSION

For the foregoing reasons, it is believed that all of the claims, as presently presented, are patentable.

The Examiner is invited to telephone the undersigned if it is believed that further amendment and/or discussion would help to advance the prosecution of the present application.

Reconsideration and allowance of claims 2-4, 6-9, 11-15, 17-18 and 22-32 are, therefore, respectfully requested.

Respectfully submitted,

Davy E. Zonéraich
Registration Number 37,267

NORRIS, McLAUGHLIN & MARCUS
P.O. Box 1018
Somerville, New Jersey 08876-1018
Phone: (908) 722-0700; Fax: (908) 722-0755
E-Mail: ipdept@nmmlaw.com
Attorney Docket No: 101215-175US